REMARKS

This Amendment responds to the Office Action dated April 19, 2005 in which the Examiner rejected claims 1-10 under 35 U.S.C. §112, second paragraph and rejected claims 1-20 under 35 U.S.C. §103.

Applicant respectfully points out to the Examiner that the reference to *L'Heureux et al* (U.S. Patent No. 6,697,942) is incorrectly noted on PTO-892 as *Josefsson et al* (U.S. Patent No. 6,691,942). Applicant respectfully requests the Examiner supplies a new PTO-892.

As indicated above, claim 1 has been amended in order to more particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Applicant respectfully submits that the amendment does not narrow the literal scope of the claim. Therefore, applicant respectfully requests the Examiner withdraws the rejection to the claims under 35 U.S.C. §112, second paragraph.

As indicated above, claim 11 has been amended for stylistic reasons. The amendment is unrelated to a statutory requirement for patentability and does not narrow the literal scope of the claim.

Claim 1 claims an equipment management system and claim 11 claims an equipment management method for managing equipment by an equipment management apparatus for acquiring management information from the equipment and a central management apparatus for centrally managing management information making packet data communication via a network over which a data processor is connected. The central management apparatus and method include a transmission controller for transmitting, to the data processor in advance of installing a new equipment management apparatus, packet data containing connection check

data addressed to a newly installed equipment management apparatus. A reception controller acquires the packet data containing the connection check data transmitted to the apparatus from the data processor before starting equipment management.

Through the structure and method of the claimed invention transmitting, to a data processor in advance of installing a new equipment management apparatus, packet data containing connection check data which is addressed to a newly installed equipment management apparatus, and having the equipment management apparatus acquire the packet data from the data processor, as claimed in claims 1 and 11, the claimed invention provides an equipment management system which can speedily make a connection check when equipment management apparatus is newly installed. The prior art does not show, teach or suggest the invention as claimed in claims 1 and 11.

Claim 14 claims an equipment management method for managing equipment by an equipment management apparatus for acquiring management information from equipment and a central management apparatus for centrally managing management information making communication in accordance with a first communication system or a second communication system. The equipment management method comprises the steps of registering information concerning an equipment management apparatus to be newly installed at the central management apparatus; determining whether a communication system between the newly installed equipment management apparatus and the central management apparatus is a first communication system or a second communication system; and in the case where the communication system is the first communication system, the central management apparatus transmitting connection check data addressed to the

equipment management apparatus without receiving initial transmission data from the equipment management apparatus to be newly installed, and in the case where the communication system is the second communication system, the central management apparatus transmitting the connection check data addressed to the equipment management apparatus in response to reception of the initial transmission data from the equipment management apparatus to be newly installed.

Through the method of the claimed invention determining whether a communication system is a first or second communication system and communicating therewith with different methods including transmitting data without receiving initial transmission data when a first communication system is used and by transmitting data in response to reception of initial transmission data when a second communication system is used as claimed in claim 14, the claimed invention provides an equipment management method which can change the method for initial settings in order to speedily connect the device. The prior art does not show, teach or suggest the invention as claimed in claim 14.

Claims 1-6, 9, 11-13 and 17-20 were rejected under 35 U.S.C. §103 as being unpatentable over *Frailong et al* (U.S. Patent No. 6,012,100) in view of *L'Heureux et al* (U.S. Patent No. 6,697,942).

Applicant respectfully traverses the Examiner's rejection of the claims under 35 U.S.C. §103. The claims have been reviewed in light of the Office Action, and for reasons which will be set forth below, applicant respectfully requests the Examiner withdraws the rejection to claims and allows the claims to issue.

Frailong et al appears to disclose a method of configuring and upgrading a network interface device. (Col. 1, lines 21-22) A network interface device is

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provided to connect a client computer network to an external network. The network interface device is provided to the client user in an initially unconfigured state. The network interface device is configured for the client system by automated procedures and protocols initiated from a remote server. The remote server provides and maintains the client information in a secure database. The use of a secure database and automated procedures minimizes the amount of input required from the user. The network interface device contains application program interfaces which facilitate communication between the client computer system and services available on the external network. (Col. 2, lines 28-41) The remote server 206 represents central facility for providing convenient and efficient configuration and maintenance of the gateway interface device. In one embodiment of the present invention, the remote server 206 (hereinafter referred to as the "remote management server") is connected to ISP 204 and maintains a dynamic dialog with ISP 204 to configure and maintain gateway interface device 208 in client network 220. Remote management server 206 interacts with gateway interface device 208 to provide configuration information and upgrade parameters required by the gateway interface device 208. In this manner, remote management server 206 basically serves as a repository for information required by the gateway interface device 208. Gateway interface device 208 contains a configuration manager which stores the configuration information transmitted from the remote management server 206. Gateway interface device 208 also contains service adapters which communicate with network services resident in the gateway interface device 208. The service managers are application programming interfaces that provide the required command and data translation for the various services available. Remote management server 206 and gateway

interface device 208 contain security information such as passwords and encryption keys that are used to establish a trust relation sufficient to ensure secure remote configuration and upgrade of gateway interface device 208. By providing a configuration management function within remote management server 206 which is registered with an ISP 204, it is possible to download configuration and upgrade information and parameters to gateway interface device 208 at the time the gateway interface is first installed between the client network 220 and the telephone client 204. This eliminates the requirement that the network administrator program the network interface device with such configuration and initialization information. This system thus greatly reduces the amount of work required to connect client network 220 to an internet. (Col. 5, lines 17-58) FIGS. 9A and 9B provide a flow diagram of the process of a client network installing and configuring a gateway interface device using the initialization protocol provided by the system software. Referring to FIG. 9A, the initialization process begins in step 902 when the customer calls an ISP to obtain an internet account. (Col. 12, lines 41-47) The ISP provides the remote management server with the configuration information for the user. According to one embodiment of the present invention, this is achieved through a web-based user interface. A customer registration web site provides a customer registration form which is used by the ISP. The ISP enters customer network addresses, domain names and network connection information in the registration form, step 906. This customer registration information is then stored in the remote management server after having been entered into the customer registration form, step 908. The remote management server acts as a storage facility for this customer information. After the customer registration information is stored, the remote management server

generates a customer registration key and sends the registration key to the ISP, step

910. The registration key serves as the principal identification and security

mechanism for initial installation of the gateway interface device in the client LAN.

(Col. 12, line 59 through col. 13, line 9)

Thus, *Frailong et al* merely discloses a gateway interface device 208 which

stores configuration information and communicates information between ISP 204

and client network 220. Thus, nothing in *Frailong et al* shows, teaches or suggests

an equipment management apparatus for acquiring management information from

equipment as claimed in claims 1 and 11 (and claim 14). Rather, *Frailong et al*

merely discloses a gateway interface 208 which stores information from server 206

(i.e., gateway interface 208 does not manage LAN 210 or computers 214).

Additionally, *Frailong et al* merely discloses gateway interface 208 which

stores configuration information from server 206. Nothing in *Frailong et al* shows,

teaches or suggests starting equipment management by the equipment

management apparatus as claimed in claim 11. Rather, gateway interface 208 of

Frailong et al merely stores configuration information in a configuration manager.

Also, *Frailong et al* merely discloses downloading configuration and upgrade

information and parameters to interface device 208 at the time the gateway interface

is first installed between the client network 220 and telephone client 204. Nothing in

Frailong et al shows, teaches or suggests a central management apparatus

comprising a transmission controller for transmitting, to a data processor, packet

data in advance of installing a new equipment management apparatus as claimed in

claims 1 and 11.

L'Heureux et al appears to disclose a technique for processing diverse data within standard electronic mail (e-mail) messages. (Col. 1, lines 12-14) A desirable feature would be the ability to provide automatic updates to user equipment without the need for user intervention. (Col. 2, lines 59-61) Once in the proper format, the e-mail message may be transferred over standard e-mail networks using standard e-mail protocols. (Col. 3, lines 25-27) A method is provided for using standard e-mail messages to deliver diverse data types to a user. This allows automatic updates to a user's equipment using a standard e-mail message. (Col. 4, lines 33-39) Referring to FIG. 1, a high level block diagram 100 of a typical system used in conjunction with the method of the present invention is shown. An editing terminal 110, for example a desktop personal computer, is used to compose e-mail messages containing the diverse data that are the subject of the present invention. The message is sent, or uploaded, via the Internet 140, for example, by land lines 120, to an SMTP server 130. The SMTP server 130 relays the uploaded message to the recipient's POP server 160. Note that both the SMTP server 130 and the POP server 160 may be co-located or, as shown in the example in FIG. 1, may be remote from each other. (Col. 4, line 63 through Col. 5, line 7) An e-mail recipient requests their e-mail from the POP server 160 through a remote client device, in this example a Desktop E-mail Terminal [DET] 150. Upon receiving the request for service, the POP server 160 transfers, or downloads the e-mail message to the DET 150. (Col. 5, lines 13-17)

Thus, *L'Heureux et al* merely discloses transmitting an email message using standard protocols. (Col. 3, lines 25-27) Nothing in *L'Heureux et al* shows, teaches or suggests a central management apparatus comprising a transmission controller

for transmitting to a data processor packet data in advance of installing a new equipment management apparatus which acquires management information from equipment as claimed in claims 1 and 11. Rather, *L'Heureux et al* merely discloses transferring an email message over standard email networks.

Furthermore, *L'Heureux et al* merely discloses embedding diverse data types in electronic mail messages. (Col. 4, lines 33-34) Nothing in *L'Heureux et al* shows, teaches or suggests a) an equipment management apparatus for acquiring management information from equipment and b) an equipment management apparatus which starts equipment management as claimed in claims 1 and 11. Rather, *L'Heureux et al* is merely directed to a data formatting method for embedding diverse data types in electronic mail messages.

Since neither *Frailong et al* nor *L'Heureux et al* shows, teaches or suggests the primary features as claimed in claims 1 and 11, applicant respectfully requests the Examiner withdraws the rejection to claims 1 and 11 under 35 U.S.C. §103.

Claims 2-6, 9, 12-13 and 17-20 depend from claims 1 and 11 and recite additional features. Applicant respectfully submits that claims 2-6, 9, 12-13 and 17-20 would not have been obvious within the meaning of 35 U.S.C. §103 at least for the reasons as set forth above. Therefore, applicant respectfully requests the Examiner withdraws the rejection to claims 2-6, 9, 12-13 and 17-20 under 35 U.S.C, §103.

Claims 7-8 and 14-16 were rejected under 35 U.S.C. §103 as being unpatentable over *Frailong et al* and *L'Heureux et al* and further in view of *Motoyama et al* (U.S. Patent No. 6,581,092) and applicant's admitted prior art.

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Applicant respectfully traverses the Examiner's rejection of the claims under 35 U.S.C. §103. The claims have been reviewed in light of the Office Action, and for reasons which will be set forth below, applicant respectfully requests the Examiner withdraws the rejection to the claims and allows the claims to issue.

Frailong et al merely discloses a customer calling an ISP to obtain an internet account and then registering the account (column 12, lines 45-47, 62-66). Nothing in *Frailong et al* shows, teaches or suggests registering information concerning equipment to be newly installed at a central management apparatus as claimed in claim 14.

As discussed above, nothing in *Frailong et al* and *L'Heureux et al* shows, teaches or suggests a) an equipment management apparatus for acquiring management information from equipment, b) a central management apparatus centrally managing management information making communication in accordance with a first or second communication system, c) registering information concerning an equipment management apparatus to be newly installed at the central management apparatus, and d) a first communication system in which a central management apparatus transmits connection check data without receiving initial transmission data from equipment to be newly installed as claimed in claim 14.

Motoyama et al appears to disclose processing performed within a computer in order to process and forward the appropriate information from the network resource to the end user. (Col. 2, lines 14-16) A feature is the use of a connectionless-mode of communication (e.g., Internet e-mail) or transmission between a machine and a computer for monitoring, diagnosing and controlling the machine, and transmitting information regarding resource usage to an end user.

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Alternatively, the e-mail which is transmitted may be implemented using a connection mode of communication. The IBM Dictionary of Computing by George McDaniel, 1994, defines a connectionless-mode transmission to be the transmission of a single unit of data from a source service access point to one or more destination service access points without establishing a connection. The IBM Dictionary also defines a connection-mode transmission to be the transmission of units of data from a source service access point to one or more destination service access points via a connection. The connection is established prior to data transfer and released following data transfer. (Col. 6, lines 46-62) FIG. 15 illustrates a process performed within the machine which determines whether a connection-mode or an e-mail-mode of communication is needed. After starting, step 770 determines if an event requires communication and if it does not, flow returns to the calling process. If communication is needed, step 772 determines whether the event requires an e-mail-mode or a connection-mode of transmission. Any type of high priority event for which immediate attention is needed or which the remote monitoring device would be interested in on an expedited basis is sent in a connection-mode of communication. This may be used when a hazardous connection exists within the machine or when something in the machine needs immediate attention. For example, if a thermistor in the fuser unit senses a high and unsafe temperature, a direct connection mode may be used. However, the transmission of a weekly or monthly report indicating the usage and a normal condition state in the machine can use the slower e-mail-mode of communication. Additionally, when the e-mail-mode of communication is not properly functioning, the connection-mode of communication is used. For example, if an Internet e-mail message is not properly received by the

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monitoring device, a direct connection-mode of communication is used. The e-mail

message may contain a request for acknowledgment of receipt and if an

acknowledgment is not received within a predetermined time (e.g. 3-24 hours) then a

connection-mode communication is used to re-transmit the message. Also, if a

connection-mode of communication is not properly functioning, then the e-mail-mode

of communication may be used. If step 772 determines that an event does not

require an e-mail-mode of communication, step 776 determines if the direct

communication channel is ready. For example, it determines if network, the

telephone or ISDN line is available. If it is, a direct communication process is

performed in step 778 to transmit the appropriate information. If the direct channel is

not ready, step 780 notifies the user through the operation panel that there is a

problem with the device. If step 772 determines that the event requires an e-mail-

mode of transmission, step 774 calls an e-mail communication process. The process

of FIG. 15 then returns to the calling process. FIG. 16 is a flowchart illustrating the

processing performed when a non-urgent message is sent from a device. After

starting, step 800 stores the information which needs to be transmitted in dynamic

state storage. Step 802 determines whether it is time to send the data. When step

802 determines that it is not time to send the data, control passes to step 800, which

was discussed previously. When step 802 determines that it is time to send data,

step 804 packages the information according to the set format, and step 806 sends

out the e-mail with the packaged information to its predetermined destination. The

process of FIG. 16 then returns to the calling process. (Col. 16, line 46 through

Col. 17, line 32)

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Thus, *Motoyama et al* merely discloses determining whether a connection mode or an email mode of communication is needed. (Col. 16, lines 46-48) Nothing in *Motoyama et al* shows, teaches or suggests registering information concerning an apparatus to be newly installed at a central management apparatus as claimed in claim 14. Rather, *Motoyama et al* merely discloses determining whether a connection mode or an email mode of communication is needed (based upon the priority with a lower priority using a slower e-mail mode).

Additionally, *Motoyama et al* merely discloses using a connection mode or email mode based upon priority. (Col. 16, lines 53-64) Nothing in *Motoyama et al* shows, teaches or suggests a) determining whether a communication system between a newly installed apparatus and a central management apparatus is a first communication system or a second communication system, b) an equipment management apparatus for acquiring management information from equipment, c) a central management apparatus centrally managing management information making communication in accordance with a first or second communication system, and d) a first communication system in which a central management apparatus transmits connection check data without receiving initial transmission data from equipment to be newly installed as claimed in claim 14. Rather, *Motoyama et al* merely discloses determining the type of communication system needed based upon priority.

Applicant's admitted prior art appears to disclose that an equipment management system transmits equipment management information acquired by an equipment management apparatus to a central management center via a communication line, and the central management center centrally manages a plurality of equipment. In such an equipment management system, in the case

where an equipment management apparatus for integrally managing a plurality of equipment is newly installed, it is first checked whether or not connection between the newly installed equipment management apparatus and the central management center is properly made. In an equipment management system utilizing a public telephone circuit (real time communication means) which ahs been widely employed conventionally, in general, an equipment management apparatus transmits connection check data for making connection check to a central management center, whereby connection check is made. Namely, when a newly installed equipment management apparatus is activated, whereby connection check data can be normally transmitted to the central management center, it is possible to check that the equipment management apparatus is normally connected to the central management center. Thus, the reason why the equipment management apparatus transmits connection check data is that the equipment management apparatus is often connected to a telephone identical to that of another communication terminal such as facsimile machine, and does not have a specific telephone number. (Page 1, line 17 through Page 2, line 19)

Thus, applicant's admitted prior art merely discloses that newly installed equipment management apparatus is activated and performs a normal transmission of connection check data to a central management center. Nothing in applicant's admitted prior art shows, teaches or suggests a) a first communication system in which a central management apparatus transmits connection check data without receiving initial transmission data from equipment to be newly installed, b) an equipment management apparatus for acquiring management information from equipment, c) a central management apparatus centrally managing information

making communication in accordance with a first or second communication system,

and d) registering information concerning an equipment management apparatus to

be newly installed as claimed in claim 14.

Since nothing in the combination of the prior art shows, teaches or suggests

the primary features as claimed in claim 14, applicant respectfully requests the

Examiner withdraws the rejection to claim 14 under 35 U.S.C. §103.

Claims 7-8 and 15-16 depend from claims 1 and 14 and recite additional

features. Applicant respectfully submits that claims 7-8 and 15-16 would not have

been obvious within the meaning of 35 U.S.C. §103 over the references at least for

the reasons as set forth above. Therefore, applicant respectfully requests the

Examiner withdraws the rejection to the claims under 35 U.S.C. §103.

The prior art of record, which is not relied upon, is acknowledged. The

reference taken singularly or in combination does not anticipate or make obvious the

claimed invention.

Thus it now appears that the application is in condition for reconsideration and

allowance. Reconsideration and allowance at an early date are respectfully

requested.

If for any reason the Examiner feels that the application is not now in condition

for allowance, the Examiner is respectfully requested to contact, by telephone, the

applicant's undersigned attorney at the indicated telephone number to arrange for an

interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened

statutory period, applicant respectfully petitions for an appropriate extension of time.
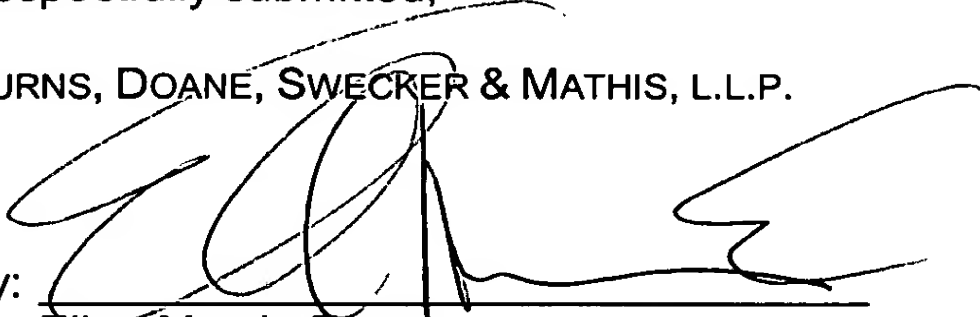
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The fees for such extension of time may be charged to our Deposit Account No. 02-4800.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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